IN THE CLAIMS:

Please cancel claims 25 and 26, and amend claims 17, 22, 27 and 30, as shown below in the detailed listing of all claims which are, or were, in the application.

Claims 1-16 (canceled)

17. (Currently amended) A bioaffinity assay for quantitative determination in a person's sample of free PAPP-A, defined as pregnancy associated plasma protein A (PAPP-A) that is not complexed to a proform of major basic protein (proMBP), wherein an amount of free PAPP-A present in said sample is determined either

i) by exposing said sample to a first binder which binds total PAPP-A and to a second binder which binds only PAPP-A complexed to proMBP and detecting total ~~PAAP-A~~ PAPP-A bound to said first binder and detecting ~~PAAP-A~~ PAPP-A complexed to proMBP bound to said second binder, and calculating a difference between measured total PAPP-A and measured PAPP-A complexed to proMBP, or

ii) by a direct bioaffinity assay measuring only free PAPP-A, by making PAPP-A complexed to proMBP non-capable of participating in ~~the~~ a bioaffinity reaction in which said sample is exposed to a

binder which binds total PAPP-A, by pre-absorbing PAPP-A complexed to proMBP by the steps of

exposing said sample to a first binder which binds to pro-MBP, allowing said proMBP to bind to said first binder,

absorbing said first binder onto a solid phase and separating said first binder and said bound proMBP from said sample,

exposing said sample, from which proMBP has been separated, to a second binder which binds total PAPP-A, and

detecting the bound PAPP-A,

wherein said first binder and said second binder in i) and ii) are both independently either an antibody or antibody fragment.

18. (Previously presented) The assay according to claim 17, wherein free PAPP-A is determined according to alternative i) and two assays are performed, in which one aliquot of the sample is exposed to a first binder which binds total PAPP-A and the total PAPP-A bound to the first binder is detected, and another aliquot of said sample is exposed to a second binder which binds only PAPP-A complexed to proMBP and the PAPP-A complexed to proMBP bound to the second binder is detected, and the amount of free PAPP-A is

calculated as a difference between determined total PAPP-A and PAPP-A complexed to proMBP.

19. (Previously presented) The assay according to claim 18, wherein the assays are non-competitive sandwich assays.

20. (Previously presented) The assay according to claim 19, wherein the first and second binders are capture binders.

21. (Previously presented) The assay according to claim 19, wherein the first and second binders are labelled binders.

22. (Currently amended) The assay according to claim 17, wherein free PAPP-A is determined according to alternative i) as one single dual analyte assay where the sample is exposed to a capture binder, which binds total PAPP-A, and to two detecting binders labelled with different labels, so that a first detecting binder labeled with a first label is directed to an epitope present in any PAPP-A molecule, where a signal of the first label is ~~used~~ detected to give total PAPP-A, and a second detecting binder labeled with a second label is directed to an epitope in a proMBP subunit

complexed to PAPP-A, where a signal of the second label is ~~used~~ detected to give PAPP-A complexed to proMBP.

Claims 23-26 (Canceled).

27. (Currently amended) A method for diagnosing persons suffering from an acute coronary syndrome or persons at risk of acute coronary syndrome ~~in a person~~, comprising

comparing an amount of a marker present in a sample derived from said person to a reference amount of said marker,

diagnosing whether said person is at risk of acute coronary syndrome based on said comparison,

wherein said marker ~~is~~ consists of either free PAPP-A, defined as pregnancy associated plasma protein A (PAPP-A) which is not complexed to a proform of major basic protein (proMBP), as such or said marker is a ratio selected from the group consisting of free PAPP-A/total PAPP-A, free PAPP-A/PAPP-A complexed to proMBP, and PAPP-A complexed to proMBP/total PAPP-A.

28. (Previously presented) The method according to claim 27, wherein free PAPP-A is determined by a bioaffinity assay method for quantitative determination in a sample of free PAPP-A, either

I) as a calculated difference between measured total PAPP-A and measured PAPP-A complexed to proMBP, or

ii) by a direct bioaffinity assay measuring only free PAPP-A.

29. (Canceled)

30. (Currently amended) The method according to claim 28, wherein free PAPP-A is determined according to alternative I) and two assay methods are performed, in which one aliquot of the sample is exposed to a first binder which binds total PAPP-A and said total PAPP-A bound to said first binder is detected, and another aliquot of sample is exposed to a second binder which binds only PAPP-A complexed to proMBP and said PAPP-A complexed to proMBP bound to said second binder is detected, and the amount of free PAPP-A is calculated as a difference between determined total PAPP-A and PAPP-A complexed to proMBP,

wherein said first binder and said second binder are both independently either an antibody or antibody fragment.

31. (Canceled)

32. (Canceled)

33. (Previously presented) The method according to claim 30, wherein the assay methods are non-competitive sandwich assays.

34. (Previously presented) The method according to claim 33, wherein the first and second binders are either capture binders or labeled binders.